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U.S. Army Corps of Engineers
Institute for Water Resources
7701 Telegraph Rd., Casey Bldg.
Alexandria, VA 22315-3868

Dear Corps of Engineers:

In order to be more responsive to the public you have invited comments from interested stakeholders. I would like to take advantage of your willingness to listen.

My particular interest is water quality which has become a growing problem. While I understand that water quality itself is an EPA problem, some of the designated assignements of the Corps have a direct impact on water quality. In fact almost all of the activities of the Corps have an impact on water quality.

As the EPA is coming to grips with point source pollution of our waters, it is beginning to grapple with non-point source pollution. Unfortunately, non-point source pollution has become the major source of pollution for our streams and lakes. As you know our wetlands are the natural filtering system for waters. Our wetlands are being destroyed at an alarming rate and the quality of our water is suffering in the process. For too long permits for wetland destruction have been nearly automatic. Whether we lose wetlands in large chunks or in small nibbles, these wetlands are lost as a filtration system and as an ecosystem. It is time to slow the rate of wetlands loss. Indeed, it is time to stop the loss of wetlands altogether. It should be more difficult to obtain permits to destroy wetlands, and if a permit is granted it should be done only in cases where the permitee will contract to restore a wetland of equal or larger size somewhere else in the same watershed. And these contracts should be enforceable. Indeed, it is reasonable to require the mitigation restoration as a precondition for obtaining the permit. Requiring restoration areas larger than the destroyed areas should be considered, since there is always a loss of wetlands due to destruction of wetlands by unpermitted activities. Besides we have suffered a net loss of wetlands every year for as long as we have been keeping records. There should be better enforcement for both the requirement to obtain a permit and the requirements written into the permits. Wetlands are an important tool for the EPA in their attempts to mitigate the affects of non-point source pollution. They need your help to maintain those wetlands as functional filters for a quality water supply.

Another activity that affects water quality is development along our streams and lakes. The vegetation that would naturally be present along stream banks and around lakes can remove many things from the water including much of the man-made pollution that finds its way into our streams and lakes. If vegetative buffers are allowed to work as a filter for our runoff, then the pollution problems in our surface waters would be mitigated. However, the Corps has been allowing permits to be issued to developers to build along our lakes and streams apparently without regard to the damage that such development will have on water quality. This problem is worsened by the effect of coal generated power. Unfortunately,

coal contains mercury, because mercury has a very high affinity for the organic sulfur found in coal. When coal is burned for power, mercury is released to the atmosphere to be returned to the land by the rain. If the runoff from the rain goes directly into streams from impermeable surfaces (house roofs, parking lots, drive ways) without passing through the root system of a vegetative buffer, the mercury will enter the water uncontested. However, if the runoff must pass through a vegetative root system most of the mercury will be bound by the organic sulfur in the roots (remember that is the property of mercury that caused the problem in the first place). Lead is also absorbed by roots by the same mechanism. Organic pollutants are filtered by these roots by a different mechanism. The importnat point is that the roots of vegetation act as an efficient filter for rainwater runoff and that we need to leave an intact buffer between our developments and our streams and lakes to protect water quality. The amount of buffer required depends both on the type of vegetation present and the slope of the land, but 25 feet is almost certainly inadequate. Steeper slopes require more buffering capacity. Vegetation with a large root mass near the surface is the best filter.

On the Savannah River we are faced with a significant laxity in permitting oversight. First, in Augusta builders were permitted to build homes on the river side of the levee. This not only caused a runoff problem for the river with consequent water quality issues, but it also resulted in a political problem for the Corps when they wanted to decommission the New Savannah Bluffs Lock and Dam (although some think that the Corps deliberately caused the problem in the first place so they would be asked to repair the lock and dam). To add to that problem the Corps lowered the flood plain on the South Carolina side of the river in North Augusta to accomodate the building of more homes too close to the river without adequate buffering capacity. This development includes a golf course. Golf courses are notorious polluters of surface waters with their fertilizers and pesticides, and this one is immediately adjacent to the river. To add insult to injury the Corps is negotiating with a group that purports to represent the Lincoln County Recreation Authority. This group wants to build a resort on Lake Thurmond that includes a golf course immediately adjacent to the lake and significant impermeable surfaces with inadequate buffering capacity between the development and the lake. If these invasions of the buffer zones of these water bodies continues unabated, we will have water quality problems similar to those on the Chattahoochie contributed by the development around Lake Lanier and by the propensity of the Corps to grant permits to anyone who wants to develop lakefront or riverfront property. Let the developers make their fortunes, but not at the expense of our water quality.

I think that the Corps should view its obligations in a broader sense than just its mandate to marshall the water resources of the United States. It would do well to use its regulatory discretion to aid the goals of state agencies and other federal agencies like the EPA. In restricting wetland permits and permits for developments on the shorelines of lakes and rivers, it could help the EPA and state environmental agencies to do their jobs, and it could help with one of its own goals, flood control. Conserving wetlands will decrease flooding as will a decrease in development along the shores of creeks, rivers and lakes.

I realize that the Corps comes under tremendous political pressure (I have a copies of the correspondence between the Corps, Senator Thurmond and Cooper Industries that eventually led to the development of Savannah Lakes Village) to bend to the will of the well heeled. I think that the Corps could do itself a favor by making all of its dealings public. That way, those individuals and groups who want to change the rules to make themselves some money would have to do so in the eye of the public and would have to justify those

changes with regard to environmental impacts and other effects their plans might have. The openness would also allow those individuals and groups whose aim it is to protect our water quality or our government agency's integrity to get a running start in mitigating the environmental impacts or ethical lapses that often occur when negotiations are conducted in secret. The Corps is a public agency. Its role is to marshall the water resources of the United States for the good of the public. It can accomplish that goal without resorting to secrecy.

In summary, I think that the Corps could improve its record with regard to water quality by interfacing effectively with other agencies and by opening their processes to public inspection.

Sincerely yours,

Frank Carl, PhD
Georgia Environmental Org.